## PATENT COOPERATION TREATY

# **PCT**

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

| pplicant's or agent's file reference  | FOR FURTHER ACTION  | see Form PCT/ISA/220 as well as, where applicable, item: 5 below. |
|---|---|---|
| ternational application No.   | International filing date (day/mon  | th/year) (Earliest) Priority Date (day/month/year)                |
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| CT/EP2004/014500  | 20/12/2004  | 18/12/2003  |
| pplicant  |   |   |
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| MORPHOCHEM AG   |   |   |
| This International Search Report has be according to Article 18. A copy is being  | en prepared by this International Set<br>transmitted to the International Bure  | arching Authority and is transmitted to the applicant au.         |
| This International Search Report consis   | its of a total of sl  | heets.  |
| X It is also accompanied  | by a copy of each prior art document  | cited in this report.   |
|   |   |   |
| <ol> <li>Basis of the report         <ul> <li>a. With regard to the language, the language in which it was filed, to</li> </ul> </li> </ol>   | ne international search was carried ou<br>unless otherwise indicated under this | ut on the basis of the international application in the item.     |
| this Authority (F   | Rule 23.1(b)).  | is of a translation of the international application fumished to  |
| b. With regard to any nuc   | leotide and/or amino acid sequenc   | ce disclosed in the international application, see Box No. I.     |
| 2. Certain claims were fo   | ound unsearchable (See Box II).   |   |
| 3. Unity of invention is l  | acking (see Box III).   |   |
| 4. With regard to the title,  |   |   |
| <u></u>   | submitted by the applicant.   | llaa.   |
| the text has been estate  | olished by this Authority to read as fol  | ilows:  |
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| E Mish record to the abetract   |   |   |
| 5. With regard to the abstract,  The text is approved as  | submitted by the applicant.   |   |
| the text has been estat   | olished, according to Rule 38.2(b), by  | this Authority as it appears in Box No. IV. The applicant         |
| may, within one month   | from the date of mailing of this intem  | national search report, submit comments to this Authority.        |
| . C. Mith report to the drawings  |   |   |
| <ol> <li>6. With regard to the drawings,</li> <li>a the figure of the drawings to b</li> </ol>  | e published with the abstract is Figure   | re No   |
|   | by the applicant.   |   |
| <u></u>   | this Authority, because the applicant   | failed to suggest a figure.                                       |
|   | this Authority, because this figure be  |   |
| b. none of the figures is to  | be published with the abstract.   |   |

#### INTERNATIONAL SEARCH REPORT

International Application No PCT/EP2004/014500

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C07D471/04 C07D A61K31/435 A61K31/422 CO7D413/12 C07D413/14 IPC 7 CO7D413/14 CO7D413/10 C07D498/06 A61K31/4375 A61P31/04 A61K31/6615 A61K31/538 A61K31/661 C07F9/59 C07F9/553 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) CO7D A61K A61P CO7F IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the International search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, BEILSTEIN Data, CHEM ABS Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to daim No. Citation of document, with indication, where appropriate, of the relevant passages Category \* 1-18 WO 03/032962 A (MORPHOCHEM AG FUER X KOMBINATORI; SPECKLIN JEAN-LUC (FR); HUBSCHWERLEN) 24 April 2003 (2003-04-24) cited in the application claims 1,14-21; examples 12,21 1 - 18WO 03/031443 A (MORPHOCHEM AG FUER KOMBINATORI; SPECKLIN JEAN-LUC (FR); HUBSCHWERLEN) 17 April 2003 (2003-04-17) cited in the application claims 1,14-17,19; examples 12,21 1-18 WO 02/059116 A (BARBACHYN MICHAEL R; GORDEEV MIKHAIL F (US); UPJOHN CO (US); GAGE JAM) 1 August 2002 (2002-08-01) cited in the application claims 1,3,5-9,12,13,26-30; examples 1,2,4-6-/--Patent family members are listed in annex. Further documents are listed in the continuation of box C. Special categories of cited documents: \*T\* tater document published after the international filing date or priority date and not in conflict with the application but \*A\* document defining the general state of the art which is not cited to understand the principle or theory, underlying the considered to be of particular relevance invention "E" earlier document but published on or after the international \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date involve an inventive step when the document is taken alone 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another "Y" document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the document is combined with one or more other such docu-O document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled other means in the art. document published prior to the international filing date but \*&\* document member of the same patent family later than the priority date claimed Date of mailing of the international search report Date of the actual completion of the International search 29/06/2005 21 June 2005 **Authorized officer** Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl. vanVoorsttotVoorst,M Fax: (+31-70) 340-3016

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International Application No
PCT/EP2004/014500

| C.(Continua | tion) DOCUMENTS CONSIDERED TO BE RELEVANT   |                       |
|-------------|---|-----------------------|
| Category *  | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|             | WO 03/002560 A (VITA INVEST SA; DEL CASTILLO JUAN CARLOS (ES); HIDALGO RODRIGUEZ JOSE) 9 January 2003 (2003-01-09) cited in the application claims 1-7,18-20; examples 1,3-13,19-26,28,29,31-35 | 1-18                  |
|             |   |                       |
|             |   |                       |
|             |   |                       |
|             |   |                       |
|             |   |                       |

## INTARNATIONAL SEARCH REPORT

Information on patent family members

International Application No PCT/EP2004/014500

| Patent document cited in search report | *             | Publication<br>date | •                 | Patent family member(s) |            | Publication date |
|--|---------------|---------------------|-------------------|-------------------------|------------|------------------|
| WO 03032962                            | A             | 24-04-2003          | BR                | 0213063                 | A          | 28-09-2004       |
| WU UJUJE90E                            | •             | 2101200             | CA                | 2460572                 |            | 24-04-2003       |
|  |               |                     | WO                | 03031443                |            | 17-04-2003       |
|  |               |                     | WO                | 03032962                |            | 24-04-2003       |
|  |               |                     | EP                | 1432705                 |            | 30-06-2004       |
|  |               |                     | HU                | 0402126                 |            | 28-02-2005       |
|  |               |                     | PL                | 367517                  |            | 21-02-2005       |
|  |               | ·                   |                   | • • • • •               | •          | 05-05-2005       |
|  | · • • • • • • |                     | US<br>            | 2005096343              |            |                  |
| WO 03031443                            | Α             | 17-04-2003          | BR                | 0213063                 |            | 28-09-2004       |
|  |               |                     | CA                | 2460572                 | A1         | 24-04-2003       |
|  |               |                     | WO                | 03031443                | A1         | 17-04-2003       |
|  |               |                     | WO                | 03032962                | <b>A2</b>  | 24-04-2003       |
|  |               |                     | EP                | 1432705                 | <b>A2</b>  | 30-06-2004       |
|  |               |                     | HU                | 0402126                 | <b>A2</b>  | 28-02-2005       |
|  |               |                     | PL.               | 367517                  | A1         | 21-02-2005       |
|  |               |                     | US                | 2005096343              | A1         | 05-05-2005       |
| W0 02059116                            |               | 01-08-2002          | CA                | 2424402                 | A1         | 01-08-2002       |
| MO 05023110                            | ^             | 01 00 2002          | EP                | 1349853                 | •          | 08-10-2003       |
|  |               |                     | JP                | 2004518677              |            | 24-06-2004       |
|  |               |                     | WO                | 02059116                |            | 01-08-2002       |
|  |               |                     | US                | 2004215017              |            | 28-10-2004       |
|  |               |                     | US                | 2003013737              |            | 16-01-2003       |
|  | ·             | ,                   | ا خت ست خبنی، رین |                         |            |                  |
| WO 03002560                            | Α             | 09-01-2003          | ES                | 2186550                 |            | 01-05-2003       |
|  |               |                     | BG                | 108498                  | Α          | 31-03-2005       |
|  |               |                     | BR                | 0210667                 | Α          | 05-10-2004       |
|  |               |                     | CA                | 2450982                 | A1         | 09-01-2003       |
|  |               |                     | CN                | 1520412                 | Α          | 11-08-2004       |
|  |               |                     | CZ                | 20040101                | <b>A3</b>  | 14-07-2004       |
| •                                      |               |                     | EE                | 200400004               | . <b>A</b> | 16-02-2004       |
|  |               |                     | EP                | 1401834                 |            | 31-03-2004       |
|  |               |                     | HR                | 20031063                |            | 30-04-2004       |
|  |               |                     | HÜ                | 0400370                 |            | 30-08-2004       |
|  |               |                     | WO                | 03002560                |            | 09-01-2003       |
|  |               |                     | JP                | 2004521147              |            | 15-07-2004       |
|  |               |                     | MX                | PA04000185              |            | 18-03-2004       |
|  |               |                     |                   | 365476                  |            | 10-01-2005       |
|  |               |                     | PL                | 572004                  |            | 03-08-2004       |
|  |               |                     | SK                | 2004147545              |            | 29-07-2004       |
|  |               |                     | US                | 200414/545              | WI         | 23-07 2004       |